AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions and listings.

1 to 32. (canceled).

33. (currently amended): A method to derive quantitative information on bone structure from an x-ray image comprising:
(a) obtaining an x-ray image; and
(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, [fourier]frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is a skeleton operator.

34. (original): The method of claim 33, wherein at least one of the indices is Hough transform.

35. (canceled).

36. (original): The method of claim 33, wherein at least one of the indices is a morphological operator.

37. (original): The method of claim 33, wherein at least one of the indices is mean pixel intensity.

38. (original): The method of claim 33, wherein at least one of the indices is variance of pixel intensity.

39. (currently amended): The method of claim 33, wherein at least one of the indices is a Fourier transform frequency spectral analysis.

40. (original): The method of claim 33, wherein at least one of the indices is fractal dimension.

41. (original): The method of claim 33, wherein at least one of the indices is a morphological parameter.

42 to 84. (canceled).

85. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is a morphological operator.

86. (new): The method of claim 85, wherein at least one of the indices is Hough transform.

87. (new): The method of claim 85, wherein at least one of the indices is a skeleton operator.

88. (new): The method of claim 85, wherein at least one of the indices is mean pixel intensity.

89. (new): The method of claim 85, wherein at least one of the indices is variance of pixel intensity.

90. (new): The method of claim 85, wherein at least one of the indices is a frequency spectral analysis.

91. (new): The method of claim 85, wherein at least one of the indices is fractal dimension.

92. (new): The method of claim 85, wherein at least one of the indices is a morphological parameter.

93. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel

intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is a mean pixel intensity.

94. (new): The method of claim 93, wherein at least one of the indices is Hough transform.

95. (new): The method of claim 93, wherein at least one of the indices is a skeleton operator.

96. (new): The method of claim 93, wherein at least one of the indices is a morphological operator.

97. (new): The method of claim 93, wherein at least one of the indices is variance of pixel intensity.

98. (new): The method of claim 93, wherein at least one of the indices is a frequency spectral analysis.

99. (new): The method of claim 93, wherein at least one of the indices is fractal dimension.

100. (new): The method of claim 93, wherein at least one of the indices is a morphological parameter.

101. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:
(a) obtaining an x-ray image; and
(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is variance of pixel intensity.

102. (new): The method of claim 101, wherein at least one of the indices is Hough transform.

103. (new): The method of claim 101, wherein at least one of the indices is a skeleton operator.

104. (new): The method of claim 101, wherein at least one of the indices is a morphological operator.

105. (new): The method of claim 101, wherein at least one of the indices is mean pixel intensity.

106. (new): The method of claim 101, wherein at least one of the indices is a frequency spectral analysis.

107. (new): The method of claim 101, wherein at least one of the indices is fractal dimension.

108. (new): The method of claim 101, wherein at least one of the indices is a morphological parameter.

109. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is frequency spectral analysis.

110. (new): The method of claim 109, wherein at least one of the indices is Hough transform.

111. (new): The method of claim 109, wherein at least one of the indices is a skeleton operator.

112. (new): The method of claim 109, wherein at least one of the indices is a morphological operator.

113. (new): The method of claim 109, wherein at least one of the indices is mean pixel intensity.

114. (new): The method of claim 109, wherein at least one of the indices is a variance of pixel intensity.

115. (new): The method of claim 109, wherein at least one of the indices is fractal dimension.

116. (new): The method of claim 109, wherein at least one of the indices is a morphological parameter.

117. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is fractal dimension.

118. (new): The method of claim 117, wherein at least one of the indices is Hough transform.

119. (new): The method of claim 117, wherein at least one of the indices is a skeleton operator.

120. (new): The method of claim 117, wherein at least one of the indices is a morphological operator.

121. (new): The method of claim 117, wherein at least one of the indices is mean pixel intensity.

122. (new): The method of claim 117, wherein at least one of the indices is variance of pixel intensity.

123. (new): The method of claim 117, wherein at least one of the indices is a frequency spectral analysis.

124. (new): The method of claim 117, wherein at least one of the indices is a morphological parameter.

125. (new): A method to derive quantitative information on bone structure from an x-ray image comprising:

(a) obtaining an x-ray image; and

(b) analyzing the image obtained in step (a) using one or more indices selected from the group consisting of Hough transform, skeleton operator, morphological operators, mean pixel intensity, variance of pixel intensity, frequency spectral analysis, fractal dimension, morphological parameters and combinations thereof, thereby deriving quantitative information on bone structure, wherein at least one of the indices is a morphological parameter.

126. (new): The method of claim 125, wherein at least one of the indices is Hough transform.

127. (new): The method of claim 125, wherein at least one of the indices is a skeleton operator.

128. (new): The method of claim 125, wherein at least one of the indices is a morphological operator.

129. (new): The method of claim 125, wherein at least one of the indices is mean pixel intensity.

130. (new): The method of claim 125, wherein at least one of the indices is variance of pixel intensity.

131. (new): The method of claim 125, wherein at least one of the indices is a frequency spectral analysis.

132. (new): The method of claim 125, wherein at least one of the indices is fractal dimension.